IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A signal processing device comprising:

processing region setting means for setting a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

movement vector setting means for setting movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

model generating means for modeling the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without movement blurring occurring, assuming that the pixel value of each of the pixels within said processing region is a value wherein the pixel value of each of the pixels without movement blurring occurring which correspond to said object is integrated while shifting corresponding to said movement vector;

normal equation generating means for generating a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into a model generated by said model generating means, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring, said first equation providing a relationship between the pixel values without said movement blurring occurring and the pixel values of the image data, said normal equation including a number of equations from the first equation and the second equation which is greater than or equal to a total number of pixels without said movement blurring occurring; and

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actual world estimating means for estimating a pixel value of each pixel wherein said

movement blurring is not occurring, by computing said normal equation which is generated

by said normal equation generating means.

Claim 2 (Currently Amended): The signal processing device according to claim 1,

wherein said normal equation generating means generates the ~~a normal equation using a first~~

~~equation wherein the pixel value of each of the pixels within said processing region is~~

~~substituted into the model generated by said model generating means, and a~~ second equation

to provide ~~wherein~~ the difference between ~~of~~ the pixel value of adjacent pixels for which

~~each pixel wherein~~ said movement blurring is not occurring.

Claim 3 (Currently Amended): A signal processing method comprising:

setting a processing region within image data wherein a light signal of the real world

is projected on a plurality of pixels, each having a time integration effect, and a portion of the

continuity of the light signal of the real world is lost;

setting movement vectors for an object within said image data corresponding to the

continuity of the light signal of the real world, wherein a portion of the continuity of said

image data is lost;

modeling the relation between the pixel value of each of the pixels within said

processing region and the pixel value of each of the pixels without movement blurring

occurring, assuming that the pixel value of each of the pixels within said processing region is

a value wherein the pixel value of each of the pixels without movement blurring occurring

which correspond to said object is integrated while shifting corresponding to said movement

vector;

generating a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into a model generated by said modeling, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring, <u>said first equation providing a relationship between the pixel values without said movement blurring occurring and the pixel values of the image data,</u> said normal equation including a number of equations from the first equation and the second equation which is greater than or equal to a <u>total</u> number of pixels without said movement blurring occurring; and

estimating a pixel value of each pixel wherein said movement blurring is not occurring, by computing said normal equation which is generated by said generating.

Claim 4 (Canceled).

Claim 5 (Currently Amended): A computer readable recording medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method comprising:

setting a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

setting movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

modeling the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without movement blurring occurring, assuming that the pixel value of each of the pixels within said processing region is

a value wherein the pixel value of each of the pixels without movement blurring occurring which correspond to said object is integrated while shifting corresponding to said movement vector;

generating a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into a model generated by said modeling, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring, <u>said first equation providing a relationship between the pixel values without said movement blurring occurring and the pixel values of the image data,</u> said normal equation including a number of equations from the first equation and the second equation which is greater than or equal to a <u>total</u> number of pixels without said movement blurring occurring; and

estimating a pixel value of each pixel wherein said movement blurring is not occurring, by computing said normal equation which is generated by said generating.

Claim 6 (Currently Amended): A signal processing device comprising:

a processing region setting unit configured to <u>set</u> ~~said~~ a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

a movement vector setting unit configured to set movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

a model generating unit configured to model the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without movement blurring occurring, assuming that the pixel value of each of the pixels

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within said processing region is a value wherein the pixel value of each of the pixels without

movement blurring occurring which correspond to said object is integrated while shifting

corresponding to said movement vector;

a normal equation generating unit configured to generate a normal equation using a

first equation wherein the pixel value of each of the pixels within said processing region is

substituted into a model generated by said model generating unit, and a second equation

which constrains the relation between each of the pixels without said movement blurring

occurring, said first equation providing a relationship between the pixel values without said

movement blurring occurring and the pixel values of the image data, said normal equation

including a number of equations from the first equation and the second equation which is

greater than or equal to a total number of pixels without said movement blurring occurring;

and

an actual world estimating unit configured to estimate a pixel value of each pixel

wherein said movement blurring is not occurring, by computing said normal equation which

is generated by said normal equation generating unit.

Claim 7 (Currently Amended): The signal processing device according to claim 6,

wherein said normal equation generating unit is configured to generate the a normal equation

using a first equation wherein the pixel value of each of the pixels within said processing

region is substituted into the model generated by said model generating unit, and a second

equation to provide wherein the difference between of the pixel value of adjacent pixels for

which each pixel wherein said movement blurring is not occurring.